

PHENIX WEEKLY PLANNING



12/02/2010
Don Lynch

12/02/2010

TECHNICAL SUPPORT 2010

2010 Shutdown (Overview)

Start Date End Date

Design, Eng'g, fabrication, procurement and site preparation tasks
in support of shutdown tasks

Done

Done

Shutdown Startup Tasks

Done

Done

Gas system maintenance, repair and upgrade

In progress

12/24

PHENIX Infrastructure maintenance, repair and upgrade

In Progress

12/24

Remove RPC Prototypes

Done

Done

Remove HBD

Done

Done

Remove RXNP

Done

Done

Remove/Reinstall BBC

Done

Done

Remove Re-install MPC

In Progress

12/3

RPC3N & MuTrigger unfinished business

Done

Done

Remove current BP, install new BP

Done

Done

DC/PC maintenance and repair (mid summer)

Done

Done

Install RPC3S (including Absorbers)

Done

Done

MuTr maintenance, repair and upgrade

In Progress

12/24

Install VTX

In Progress

12/9



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This Week:

- Survey MMS, CM and beampipe
- Re-install BBC's and MPC's
- Survey of VTX West
- Continue VTX Cabling and Piping
- Complete RPC3S services
- Install VTX East
- Install VTX Services
- Continue restoring services to CM and MMS
- Future upgrades support

Next Week

Complete VTX Installation

Begin End of shutdown tasks

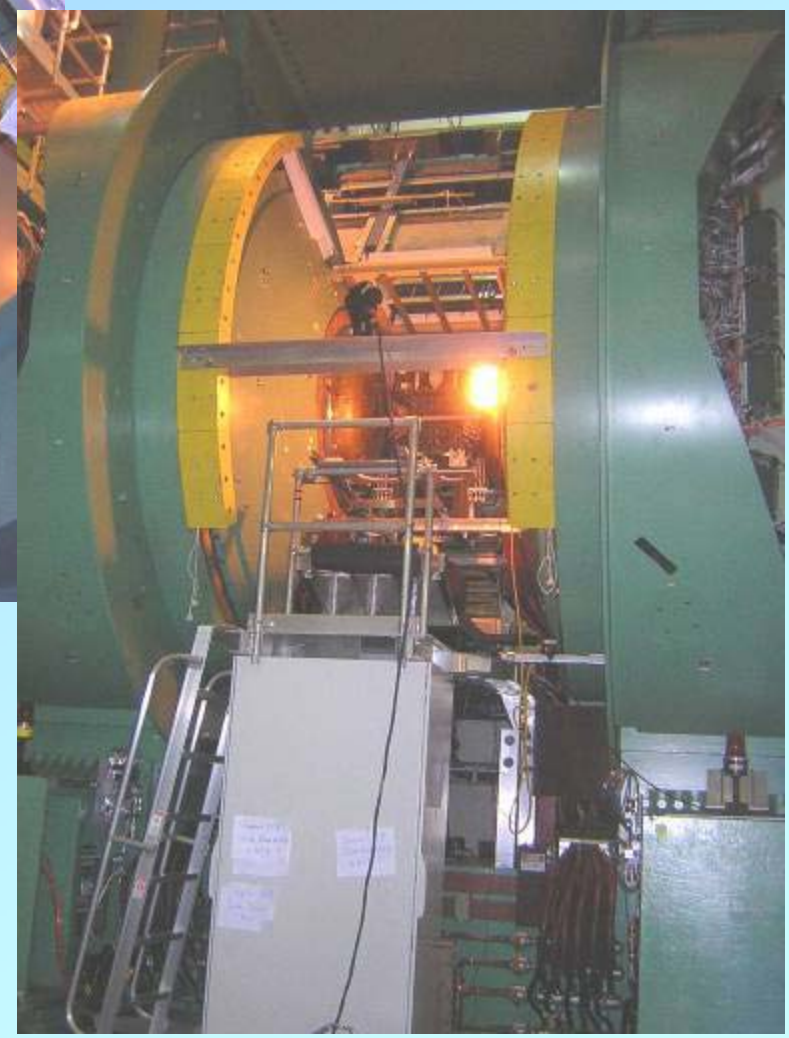
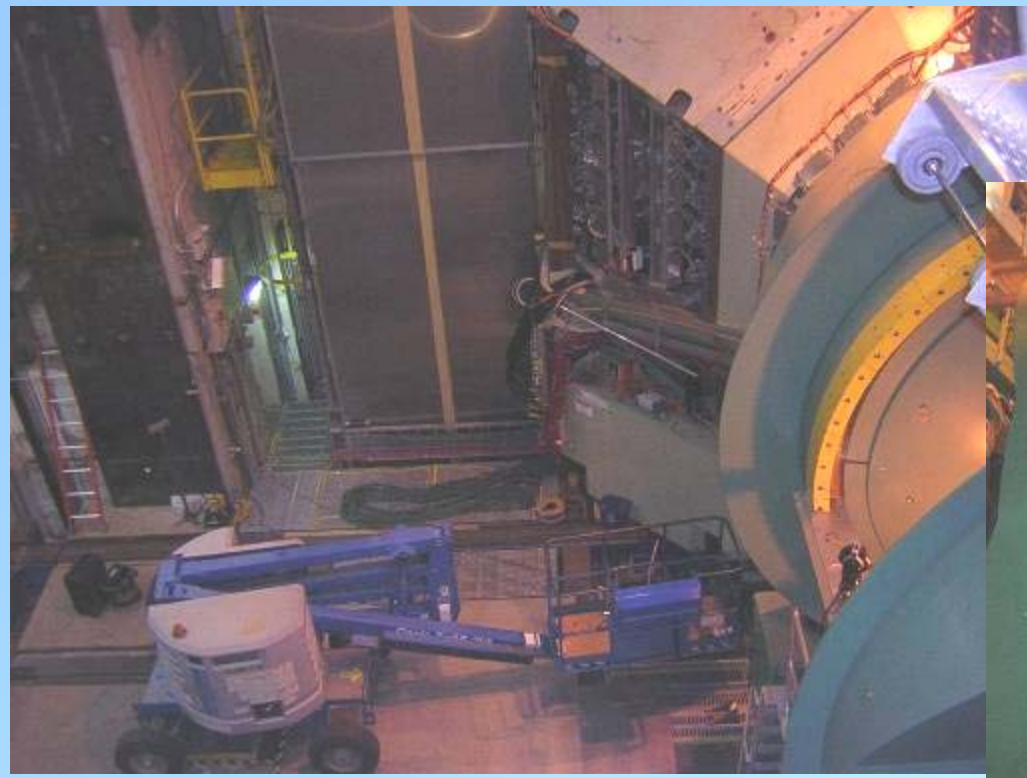
Complete restoring services to CM and MMS

Final VTX Survey

Install RPC1 Prototype and Prototype PE & Pb Absorbers

Roll -in EC

Future upgrades support



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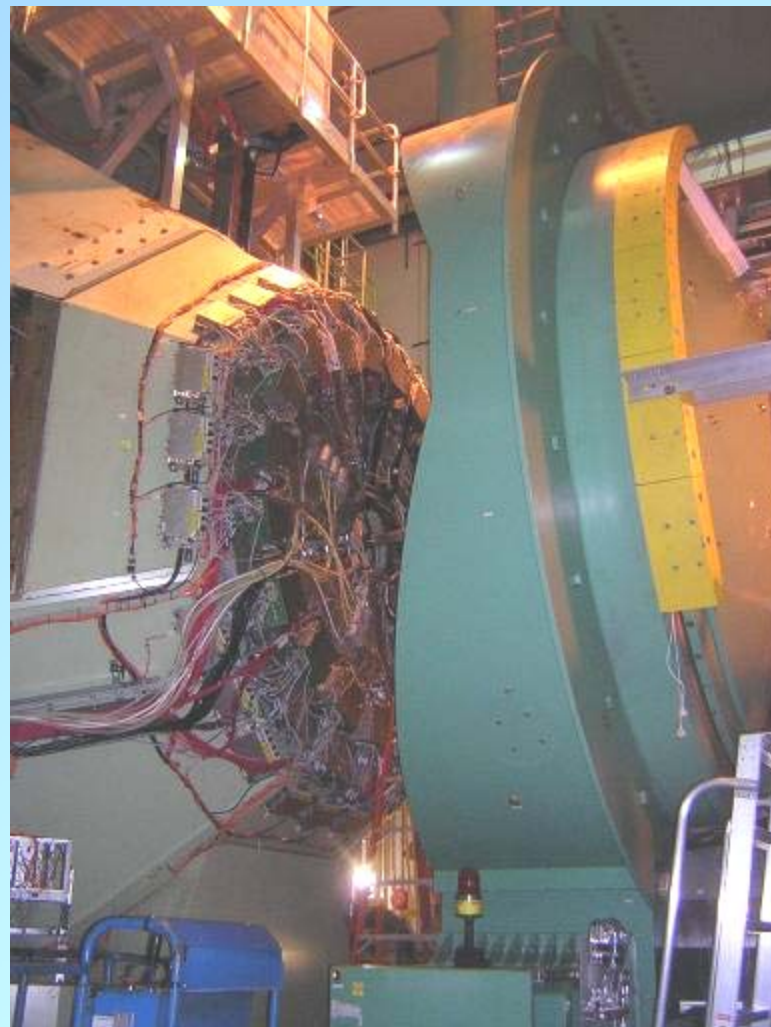




TECHNICAL SUPPORT 2010



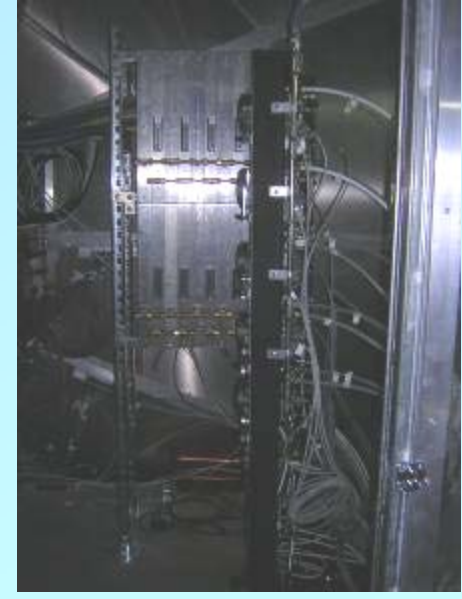
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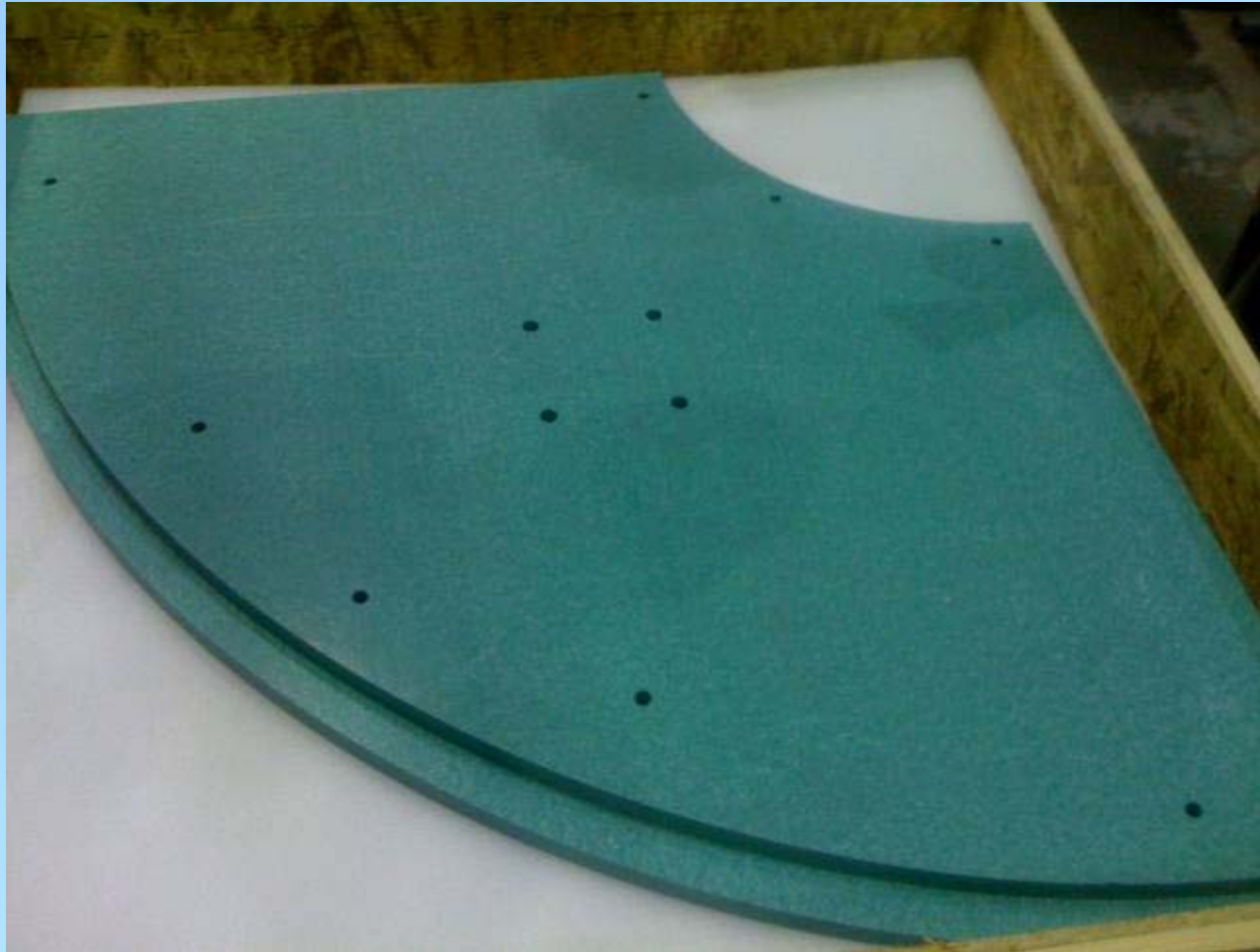
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TECHNICAL SUPPORT NO-0

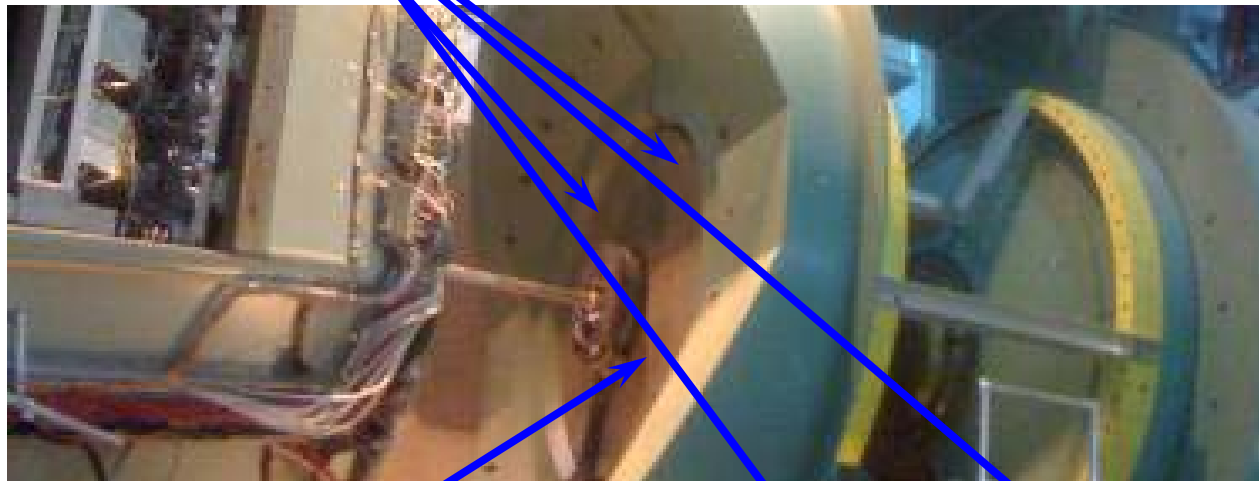


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Borated Poly Absorbers, (Lead Absorbers are below, not seen in picture)

Prototype Absorbers go here



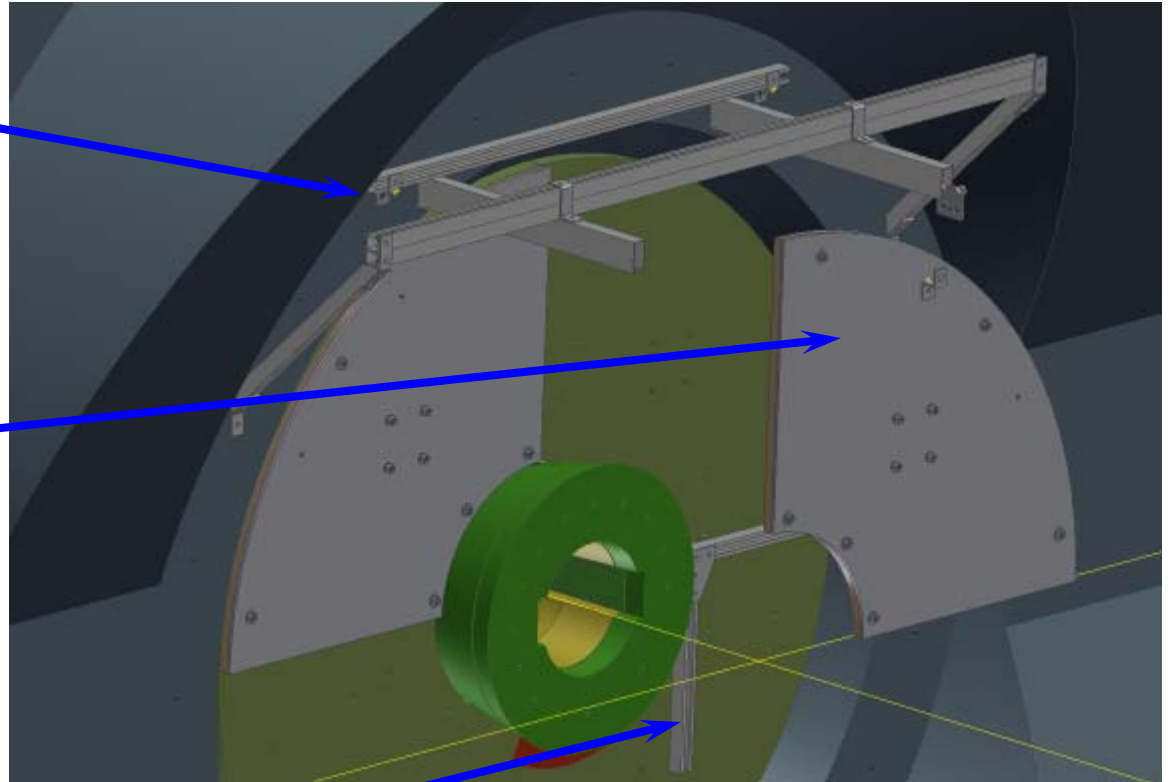
RPC1
Prototype
Goes Here



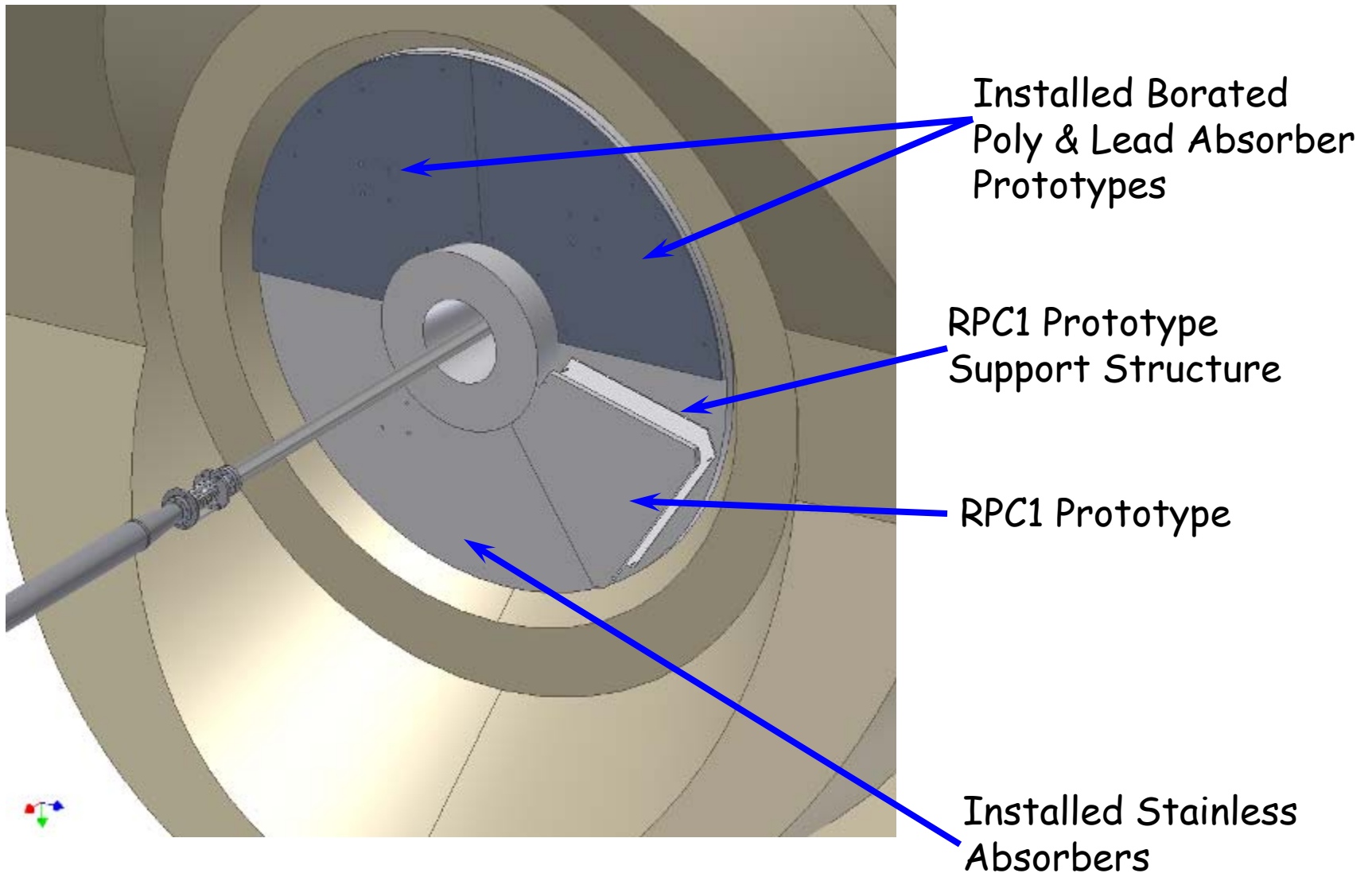
Installation scheme for Borated Poly and lead prototypes:

Installation
support structure
attached to CM

Prototype absorbers
lifted with crane ,
attached to installation
support structure by
trolley and slid into
position



Shelf support to help
align and position
absorber prototypes.



Remaining Shutdown Tasks

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Chiller cooling water	Done			Done
VTX	Assemble west 1/2 detector	Done			Done
VTX	Design survey theodolite support brackets for CM lead shield	Done			Done
VTX	Route fibers rack room to CME Rack	Done			Done
PHENIX	Bakeout/activate NEG for new BP	Done			Done
PHENIX	Leak check new BP	Done			Done
VTX	Test west 1/2 detector	Done			Done
VTX	Survey east barrels 1-4	Done			Done
PHENIX	Re-run MuTrigger fiber from MMS to rack room	Done			Done
VTX	Fabricate survey support brackets	Done			Done
VTX	Bring Support structure to Chem Lab - Done	Done			Done
VTX	Install survey support brackets	Done			Done

Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT 2010

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
RPC3S	Build TVB wall	Done			Done
VTX	Survey west 1/2 detector	Done			Done
VTX	Re-install bridge water manifold and cable trays	Done			Done
VTX	Chiller platform 480V power	Done			Done
VTX	Assemble east 1/2 detector	Done			Done
PHENIX	Re-install MuTr station 2 channel air distribution	Done			Done
VTX	Prepare thermocouple map	Done			Done
VTX	Test east 1/2 detector	Done			Done
VTX	Install NOVEC piping from chiller platform area to VTX area	Done			Done
VTX	Receive extension rails/design/modify for installation	Done			Done
VTX	Survey east 1/2 detector	Done			Done
PHENIX	Install access to inside MMS	Done			Done

Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT 2010

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
VTX	Mate east and west 1/2 detectors	Done			Done
VTX	Survey/align east and west detector	Done			Done
VTX	Modify strongbacks for basket lift	Done			Done
VTX	Install extension rails	Done			Done
PHENIX	Veterans Day Holiday	Done			Done
RPC3S	NRTL cable trays	Done			Done
VTX	Transport west 1/2 detector to IR	Done			Done
VTX	Install west 1/2 detector	Done			Done
VTX	Assemble and install NOVEC distribution manifolds near VTX	Done			Done
RPC3S	Re-install shielding	Done			Done
VTX	Install humidity sensors	Done			Done
PHENIX	Remove bakeout equipment	Done			Done
PHENIX	Survey and align MMS, CM and new BP	Done			Done

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Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT 2010

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Annual PHENIX Safety Review	Done			Done
PHENIX	Install power upgrade to bridge	Done			Done
RPC3S	Finalize cable tray/Cable installation	Done			Done
RPC3S	Final piping	Done			Done
VTX	Install west 1/2 detector Bias, LV and signal cables	Done			Done
VTX	Install one Chiller for QA testing (on ground)	Done			Done
VTX	Connect west 1/2 detector to NOVEC cooling	Done			Done
VTX	Survey/align west 1/2 detector	Done			Done
VTX	Transport east 1/2 detector to IR	Done			Done
RPC1&Abs Proto	Installation plan	Done			Done
RPC1&Abs Proto	WP	Done			Done
PHENIX	Re-install BBCs cabling/cooling pipes	Done			Done
PHENIX	Re-install BBCs	Done			Done
PHENIX	AH South exit chiller platform installation	Done			Done
VTX	Install 3 chillers on chiller platform	Done			Done

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Remaining Shutdown Tasks, Continued

THE PHENIX PROJECT USA 400T 20-0

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
VTX	Install east 1/2 detector	Done			Done
VTX	Route 100 LV cables from bridge rack to near VTX	Done			Done
VTX	Route 260 duplex/simplex fibers from CME rack to near VTX	Done			Done
VTX	Route 7 Belden 16 pair cable trunks from CME rack to near the VTX	Done			Done
PHENIX	Install East Vertical Lampshade on MMS	Done			Done
VTX	Survey/align east 1/2 detector	12/2/2010	1 day	PHENIX tech, designer, 2 surveyors	after installation
RPC3S	Thermostats	12/3/2010	1 day	1 electrician	As convenient
RPC1&Abs Proto	Installation fixtures design and fabrication	12/3/2010	3 days	PHENIX ME, Designer	In Progress
VTX	Install interlock PLC on bridge	12/3/2010	2 weeks	PHENIX EE, electrician, 1 PHENIX Tech	As soon as PLC is ready
VTX	Route 100+ thermocouple extensions from PLC box to near VTX	12/3/2010	1 day	3 PHENIX techs	In Progress
RPC3S	Re-install FCAL and any other disrupted subsystems	12/3/2010	2 days	2 PHENIX techs, 1 PHENIX EE	As convenient
VTX	Install east 1/2 detector Bias, LV and signal cables	12/3/2010	1 week	2 PHENIX techs	after survey
PHENIX	WP for DC repairs	12/3/2010	2 days	ME	As convenient

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<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Re-install MPCs	12/3/2010	1 week	2 PHENIX techs	In Progress
VTX	Connect east 1/2 detector to NOVEC cooling	12/3/2010	2 days	2 PHENIX techs	Immediately after survey
VTX	In situ QA electronics test on east 1/2 detector	12/3/2010	2 days	PHENIX scientists A/R	As services are installed
VTX	Final VTX survey	12/3/2010	1 day	1 PHENIX tech, designer, 2 surveyors	After east QA
VTX	Final BP survey	12/3/2010	1 day	1 PHENIX tech, designer, 2 surveyors	After east QA
PHENIX	Install MuID collars	12/6/2010	1 day	3 PHENIX techs	After EC in IR
PHENIX	Re-attach cables, gas piping, water piping and fibers to CM and MMS	12/7/2010	2 weeks	3 PHENIX techs	In Progress
PHENIX	MuTr and MuTrigger remaining subsystem tasks and tests	12/7/2010	2 weeks	1 PHENIX techs MuTr/Trig Groups	As convenient
PHENIX	Remove manlifts, decking and 12 ton crane from IR to run storage	12/8/2010	1 day	3 PHENIX techs	After BBCs & MPCs & VTX installed
PHENIX	Move MuID collars to IR	12/8/2010	1 day	3 PHENIX techs	After BBCsMPCs
PHENIX	Prep EC for move to IR	12/8/2010	1 day	3 PHENIX techs	After BBCs & MPCs & VTX
PHENIX	Move EC to IR	12/9/2010	1 day	3 PHENIX techs	After Prep

Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT 20-0

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Design CM alignment stops	12/10/2010	1 week	ME, designer	As time permits
PHENIX	Fabricate CM alignment stops	12/10/2010	1 week	CS	After design
PHENIX	Close access to MMN	12/10/2010	1 day	1 PHENIX tech	> MuTr/ Trig < flam gas
RPC3S	RPC gas controllers final installation and RPC subsystem commissioning	12/10/2010	1 week	1 PHENIX tech, RPC Group	As soon as convenient
PHENIX	Wire dumb waiter	12/10/2010	1 day	Electrician	After dumb waiter installed
PHENIX	Fold down EC platforms and install dumb waiter	12/10/2010	1 day	2 carpenters, 2 riggers	After EC in IR
PHENIX	Re-install EC cables, fibers, water and gas piping	12/10/2010	4 days	3 PHENIX techs, 2 scientists, 1 electrician	After EC in IR
PHENIX	DC repairs	12/15/2010	3 days	1 PHENIX tech, PHENIX scientists A/R	After EC cables, etc. installed
PHENIX	Gas mixing house R-134A shed addition R134A bottle warmers	12/15/2010	1 day	1 PHENIX Tech	Get CAD approval then order. Install when convenient
PHENIX	Pink sheets, blue sheets, white sheets	12/24/2010	2 weeks	2 PHENIX techs, PHENIX scientists A/R	After DC Repairs
PHENIX	Chiller platform fire detection and suppression	12/24/2010	1 week	1 CAD plumbers, 1electrician	ASAP after platform is installed

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Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT 2010

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Assemble shield wall	12/24/2010	4 days	1 rigging crew	After EC rolled in
PHENIX	Start flammable gas	12/24/2010	1 day	1 PHENIX tech	After shield wall in place
FoCal Proto	Design plan	12/30/2010	2 weeks	PHENIX ME	In Progress
FoCal Proto	Installation plan	12/30/2010	2 weeks	PHENIX ME	In Progress
PHENIX	Install plug door	12/30/2010	1 day	1 rigging crew	After shield wall built
PHENIX	Close shield wall	12/30/2010	1 day	3 PHENIX techs	After pink/blue/white sheets
PHENIX	Install safety interlocks	12/30/2010	1 day	CAD safety	After shield wall closed
PHENIX	Close out all 2010 shutdown WP's	12/31/2010	1 day	1 PHENIX ME	After shutdown completed
RPC1&Abs Proto	Electronics & Gas Support Installation	12/31/2011	3 days	3 PHENIX techs	If Time Permits
PHENIX	End of shutdown party	1/7/2011	1 day	All of PHENIX	After shutdown completed

Remaining Shutdown Tasks, Continued

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<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
RPC1&Abs Proto	Installation	12/8/2010	3 days	3 PHENIX techs	If Time Permits
FoCal Proto	ESRC review	>1/1/2011???	2 weeks	PHENIX ME	Not Scheduled
FoCal Proto	Support structure design	>1/1/2011???	3 days	PHENIX ME, Designer	Not Scheduled
FoCal Proto	Support structure fabrication	>1/1/2011???	2 weeks	2 PHENIX techs, CS	Not Scheduled
FoCal Proto	Electronics, cooling, gas support design	>1/1/2011???	3 days	PHENIX ME, Designer	Not Scheduled
FoCal Proto	Electronics, cooling, gas support fabrication	>1/1/2011???	1 week	2 phenix TECHS	Not Scheduled
FoCal Proto	Electronics, cooling, gas support installation	>1/1/2011???	3 DAYS	3 phenix TECHS	Not Scheduled
FoCal Proto	Support structure installation	>1/1/2011???	2 DAYS	3 phenix TECHS	Not Scheduled

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2010 Building Maintenance Issues

TECHNICAL SUPPORT 2010

- Roof leaks in utility bathroom at northwest corner behind tech offices, over door between rack room and assembly hall and over door between control room and elect. ass'y room.
- General maintenance for Trailer Offices (in progress)
- Roof leaks in laser room and IR (southeast corner)
- Flooding in AH/ Driveway heaving [Lake PHENIX]
- New HVAC in Control Room and Conference Room



12/02/2010

PHENIX Procedure Review Current Status:

148 Procedures Identified

- 85 Made Inactive (not currently in use, will require revision to re- activate if and when necessary, available for reference purposes)
- 9 CAD procedures relevant to PHENIX, all are available and available on the CAD web site
- 42 Procedures (1 of these soon needs updating)
- 11 Proposed/Draft Procedures (never previously formalized) (3 are ready for review)

Nothing New This Week

Web retrieval of latest procedures now available from PHENIX Internal:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_procedures.htm

1. Annual PHENIX Safety review: no significant problems, waiting for minutes/action items
2. RPC1 Prototype & Borated Poly/Lead Absorber Review
Detector and absorber info and installation plan sent to Y Makdisi & CAD Safety.
3. Focal Prototype Review: Not enough info yet.
Meeting w/ Ed K. on Monday
4. BNL Standards for Ethics - Required Training
Due by 12/31
5. From Ray Karol : *Do Not Park Near Fire Hydrants*
6. In preparation for the next run: get ODH training up to date: ODH-1 web course, ODH-1 practical training up-to-date, current physical.
- check POM calibrations, documented monthly escape pack inspections per C-A-OPM 13.26, rev 01.

Where To Find PHENIX Engineering Info



We're coming down the home stretch for the 2010 Shutdown.



Jets vs Patriots On Monday Night!

Links for the weekly planning meeting slides, archives of past meeting slides, long term planning, pictures, videos and other technical info can be found on the PHENIX Engineering web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

